



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,261	06/28/2001	Gary M. Lewis	2386.2003-002	5056
21005	7590	12/10/2004	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			MARTIN, NICHOLAS A	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/894,261	LEWIS ET AL. 
	<b>Examiner</b> Nicholas A. Martin	<b>Art Unit</b> 2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 28 June 2001.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-13 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 28 June 2001 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_.  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5)  Notice of Informal Patent Application (PTO-152)  
Paper No(s)/Mail Date 2. 6)  Other: \_\_\_\_.

1. Claims 1-13 are presented for examination.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 4-5, 8-9 and 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Rabenko et al. (hereinafter Rabenko), US 6,765,931.
3. As per claim 1, Rabenko teaches a method implemented in an Internet node for reducing Internet bandwidth used for VoIP relay, a first modem coupled to the Internet node and a second modem coupled to another Internet node (Col. 105, lines 23-32, lines 44-47), the method comprising:

upon detecting no data received from the other Internet node to transmit to the first modem, regenerating idle data to transmit to the first modem (Col. 18, lines 30-41; Col. 30, lines 57-60); and

upon detecting idle data received from the first modem to forward to the other Internet node, dropping the detected idle data (Col. 21, lines 20-27).

4. As per claim 4, Rabenko teaches the method as claimed in Claim 1 wherein the Internet node is an Internet Gateway (Col. 2, lines 1-5; Col. 104, lines 59-64).

5. As per claim 5, Rabenko teaches an apparatus for reducing Internet bandwidth used for transferring data between a first modem and a second modem over an IP network (Col. 65, lines 1-3; Col. 105, lines 23-32, lines 44-47), the apparatus comprising:

means for detecting idle data received from the first modem to forward over the IP network (Col. 21, lines 20-27);

means for dropping the detected idle data (Col. 21, lines 20-27); and

means for regenerating idle data to transmit to the second modem upon detecting no data received over the IP network to forward to the second modem (Col. 18, lines 30-41; Col. 30, lines 57-60).

6. Claims 8 does not teach or define any new limitations above claim 4 and therefore is rejected for similar reasons.

7. As per claim 9, Rabenko teaches an Internet node comprising:
  - an idle detect module which detects idle data received from a first modem coupled to the Internet node to be forwarded to a second modem and drops the detected idle data (Col. 21, lines 20-27; Col. 105, lines 23-32, lines 44-47); and
  - an idle generate module which regenerates idle data to transmit to the first modem upon detecting no data received from a second modem coupled to another Internet node to be forwarded to the first modem (Col. 18, lines 30-41; Col. 30, lines 57-60; Col. 105, lines 23-32, lines 44-47).
8. Claims 12 does not teach or define any new limitations above claims 4 and 8 and therefore is rejected for similar reasons.
9. As per claim 13, Rabenko teaches a computer program product, for reducing Internet bandwidth used for transferring data between a first modem and a second modem over an IP network (Col. 65, lines 1-3; Col. 105, lines 23-32, lines 44-47), the first modem coupled to an Internet node, the second modem coupled to an Internet node, the first Internet node and the second Internet node coupled to the IP network (Col. 13, lines 38-43; Col. 105, lines 23-32, lines 44-47), the computer program product comprising a computer usable medium having computer readable program code thereon, including program code which:
  - regenerates idle data to transmit to the first modem, upon detecting no data received from the second Internet node to forward to the first modem (Col. 3, lines 52-55; Col. 18, lines 30-41; Col. 30, lines 57-60); and

detects idle data received from the first modem to forward to the second Internet node (Col. 3, lines 52-55; Col. 21, lines 20-27); and  
drops the detected idle data (Col. 3, lines 52-55; Col. 21, lines 20-27).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2-3, 6-7 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabenko et al. (hereinafter Rabenko), US 6,765,931 and HO et al. (hereinafter HO), US 2003/0133461, in view of 'Official Notice'.

11. As per claim 2, Rabenko does not explicitly teach the method as claimed in Claim 1 wherein the idle data is 'FF'.

12. HO teaches dropping idle data from transmission by identifying the idle data with an idle flag (Paragraph [0047]).

13. Rabenko and HO do not teach the method in Claim 1 wherein the idle data is 'FF'. However 'Official Notice' is taken by the Examiner that allocating idle data to memory is well known. It would have been obvious to one of ordinary skill in the art to allocate idle data as a distinct value or flag so that the idle data can be identified and dropped from the transmission. Allocating idle data to a set value or flag would improve

functionality by increasing the ease and efficiency as to detecting such data and would in turn increase the functionality of the overall transmission.

14. As per claim 3, Rabenko does not explicitly teach the method as claimed in Claim 1 wherein the idle data is '7E'.

15. HO teaches dropping idle data from transmission by identifying the idle data with an idle flag (Paragraph [0047]).

17. Rabenko and HO do not teach the method in Claim 1 wherein the idle data is '7E'. However 'Official Notice' is taken by the Examiner that allocating idle data to memory is well known. It would have been obvious to one of ordinary skill in the art to allocate idle data as a distinct value or flag so that the idle data can be identified and dropped from the transmission. Allocating idle data to a set value or flag would improve functionality by increasing the ease and efficiency as to detecting such data and would in turn increase the functionality of the overall transmission.

18. Claims 6 and 10 do not teach or define any new limitations above claim 2 and therefore are rejected for similar reasons.

19. Claims 7 and 11 do not teach or define any new limitations above claim 3 and therefore are rejected for similar reasons.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Modem Activity Detection".

i. US 4,567,595

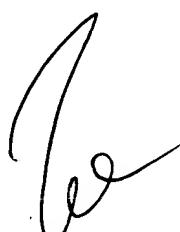
Hedlund, Kurt A.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas A. Martin whose telephone number is (571) 272-3970. The examiner can normally be reached on Monday - Friday 8:30 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3970.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

nam  
December 2, 2004

  
JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100